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ABSTRACT

This quasi-experimental study collected a comprehensive set of data on half-day and full-day kindergarten programs in the Wilmette, Illinois School District Number 39 during the 1985-1986 school year. Programs differed mainly in length of school day and number of extra activities, and not in amount of academic learning time. Student school achievement test scores were collected at an early and a later point in the year; ratings of student self-esteem were also made at the time of pre- and post-achievement testing. Teachers in both programs were surveyed to determine how well they were getting to know their students and how well they felt they were meeting students' needs. They were asked to report on students' behavior and responsiveness during the last hour of the school day. Parents were asked to provide similar information and to describe changes they had seen in their children's behavior during the school year. Multiple regression was used to determine which of the variables studied predicted success in kindergarten, defined as academic readiness and possessing a good self-image. Findings indicated only very small differences between half-day and full-day kindergarten. Related materials, including tables, teachers' lists of advantages and disadvantages of full-day and half-day programs, and parents' comments are included with appended survey forms. (RH)

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WILMETTE DISTRICT #39
KINDERGARTEN STUDY

FINAL REPORT

April, 1986

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WILMETTE KINDERGARTEN STUDY

I. INTRODUCTION

Wilmette District 39 has added two forms of full-day kindergarten to its program for the 1985-1986 school year. Two classes meet from 9 A.M. to 2 P.M. and two classes meet from 9 A.M. to 3 P.M. The full-day classes implement the same curriculum as the regular half-day program, and add art, music, and physical education taught by specialists during the extra time. Also added are rest and play times. Both half- and full-day programs include a teacher's aide in the classroom.

When the decision was announced that the Wilmette district was planning to institute a full-day kindergarten program on a temporary basis, the number of parents interested in enrolling their children in such a program was larger than the spaces allotted for the year. Therefore a lottery was held to fill the available classroom spaces.

The concurrent operation of the full- and half-day programs prompted the kindergarten faculty and administration of the district to undertake a comparison study of the impact of the additional time on students, teachers, and parents. The district contacted the Institute for Educational Research (IER) for technical assistance in designing and carrying out the study.

Early in the school year, IER designed the research in cooperation with the kindergarten teachers and assistant superintendent Dr. Sam Mikaelian. The instruments to be used were chosen by a consensus of this operations group. After data were collected, IER conducted a preliminary analysis of the data and presented the preliminary findings to the operations group. This operations group then gave additional input based on their experience and insights, and their reactions to the data analysis. As a consequence, several additional points were added to this final report.

It was decided to compare, with respect to program, the students' self-esteem and academic performance, the teachers' relationship with their students, and the parents' awareness and understanding of their children's development during kindergarten . The purpose of the study was to determine if there was one "best" approach to setting the kindergarten schedule, or if different schedules might be appropriate for children with specific characteristics or needs.

II. DESCRIPTION OF INSTRUMENTS USED IN DATA COLLECTION

This study was quasi-experimental in nature, since students were not assigned entirely at random to classes. Thus, both pre- and post-measures of student self-esteem and academic performance were needed. In addition, pre- and post-measures of teachers' relationships with their students were obtained.

The first set of measures were administered during the first two weeks of November, 1985; at this point in the school year, teachers felt that they would be sufficiently knowledgeable about their students to provide valid information about their behavior. The second set of

measures was administered during the first two weeks of March, 1986.

The Wilmette district had already planned to administer the Metropolitan Readiness Test (MRT) to their students, which was thus chosen as the measure of academic performance for the purposes of this study. The MRT consists of a series of paper-pencil items assessing skills important for early school learning; these include pre-reading, number skills, and language development. Level I is designed for use at the beginning and middle of kindergarten, while Level II is designed for use at the end of kindergarten and the beginning of grade 1. The purpose in administering different tests for the beginning and end of a school year lies in the need to fully measure student progress over time. If some students are scoring near the top of the test at the beginning of the year, there is less "room" available for them to show improvement on that test when they take it again later in the year. Because of this ceiling effect, the test given at the end of the year must allow for a complete assessment of the progress of all students by including more difficult items than the previous test.

The content of Level I is the more basic pre-reading skills, including subtests in auditory memory, rhyming, letter recognition, visual matching, school language and listening, and quantitative language. Scores are obtained in each of the above areas, in addition to a pre-reading composite score. Level II focuses on higher-level skills needed in beginning reading and mathematics. These include subtests in beginning consonants, sound-letter correspondence, visual matching, finding patterns, school language, listening, quantitative concepts and quantitative operations. In addition, a second pre-reading composite score is derived from these subtests.

The Behavioral Academic Self-Esteem (BASE) inventory was selected by the Wilmette kindergarten teachers for measurement of self-esteem, after a review by IER staff of instruments available in this area. Developed by Stanley Coopersmith, the best-known researcher in the area of self-esteem, the BASE is one of the few instruments available to measure this construct in young children. It was selected for use in this study due to its reliability, validity and norms, which were more technically adequate than other possible choices. The BASE is a 16-item rating scale to be filled out by the teacher, which provides subtest scores in the areas of student initiative, social attention, success/failure, social attraction, and self-confidence. This scale was filled out for each student by his/her teacher in November 1985 and again in March 1986.

In addition to measures related to student performance, the Wilmette district wished to gather data on teachers' relationships with their students, using input from the kindergarten teachers themselves. Therefore, IER designed a questionnaire to be filled out by the teacher which sampled knowledge of her students. In November 1985, teachers answered questions on 25% of their students, identified by selecting every fourth student on the class list. The same questionnaires were filled out in March 1986 on a second sample of 25% of the class. Every fourth student was again chosen for this sample, but different students were obtained by beginning the count at the second name on the list, rather than the first.

In this survey, teachers were asked to rate the behavior of the selected child about one hour before the end of the kindergarten session in the areas of restlessness, tiredness, aggression, listening ability, cooperation with peers, fine and gross motor skills, and attention span. In addition, the teacher was asked how well he/she could predict this child's reaction to a series of events such as a fire, a surprise visit by a clown, a lost pencil, or the choice of a partner for a game. The questionnaire also included factual questions about the child, such as whether the child has a pet, a brother or sister, or a two-parent family, and questions of teacher opinion, including whether the child has a good imagination or adequate fine and gross motor skills for his/her age.

The teachers' relationship to their classes was further explored in a second questionnaire which focused on the class as a whole. Two questions in this questionnaire were identical to those in the individual student questionnaire discussed above; these asked the teacher to rate the behavior of the whole class about one hour before the session ends, and asked the teacher how well he/she could predict the class reaction to a series of events. In addition, the teacher was asked to indicate the proportion of student in the class who had exhibited certain behaviors during the previous five school days. These included thumb-sucking, crying, bathroom accidents, as well as initiating an academic or play activity or a game. A final section of the questionnaire asked the teachers to indicate how well they felt they were meeting their students' needs. Two open-ended questions were also included, which asked teachers to give their perceptions of the advantages of half-day and of full-day programs.

A third questionnaire was developed by IER to collect information from parents on their children's characteristics and behavior. This questionnaire was administered in February 1986, and thus included questions regarding the child's reaction to the present school year. Parents were asked to indicate their children's preschool experience, age, level of tiredness, aggression, excitement, etc. during the first half-hour upon returning from school, the child's primary activity after school, changes in the child's behavior in a number of areas, major changes that had occurred recently within the family, and parent preferences regarding kindergarten scheduling for their children.

Since it was recognized that there might be child demographic variables which were more important than program assignment in their effect on the dependent variables, these were considered as independent variables along with program assignment. Child variables included age, sex, number of parents in the home, and primary home language.

III. IDENTIFICATION OF SAMPLES SURVEYED

All four full-day kindergartens were surveyed for this study. In addition, four teachers of half-day kindergartens were also included. Since the teachers in the half-day programs each had two classes, one in the morning and a second in the afternoon, children from eight half-day programs were assessed, along with those in the four full-day programs. MRT and BASE scores were obtained on 237 students, although

not all students were available for every testing. In addition, 240 parents of children in these twelve kindergarten classes were sent questionnaires to complete, and a total of 182 responded to the survey.

IV. FINDINGS

Demographic Information

At the time of the first testing, students were between the ages of 5 years 1 month and 6 years 9 months, with a mean of 5 years 7 months. The mean of the half-day students was 67.33 months and ranged from 61 to 79 months, while the mean for students in the full-day program was 67.65 months, with a range of 61 to 81 months. There were no significant age differences in the two types of kindergarten programs. There were slightly more girls than boys in the sample, with 128 girls to 109 boys, and these proportions were similar to those in both the half- and full-day programs. Girls as a group, however, were slightly younger than boys.

Almost all students surveyed lived in two-parent households. Only 14 of 237 (6%) lived with only one parent. However, 11 of those 14 were enrolled in the full-day program, and this difference was statistically significant. In addition, information obtained from parent surveys indicated that for 25% of the half-day and 44% of the full-day students, both parents were employed outside the home. This difference approached but did not attain significance.

Of those for whom a primary language was known, 91% spoke English as a first language. Information was not available regarding a first language for 52 of the students, or 22% of the total. There was no difference in primary language background among the students in either program, as the table below indicates.

STUDENTS' PRIMARY LANGUAGE

	Half-Day	Full-Day
English is first language	84	81
English is not first language	9	8

In the half-day programs there were 3 students who had been retained from the previous year, and 7 retained students in the full-day classes.

Metropolitan Readiness Tests

Pre Test

Level I of the Metropolitan Readiness Tests (MRT) was administered in November 1985 to 148 students in the half-day kindergartens and to 89 students in the full-day program. Level I is designed to be administered in the early part of the kindergarten year. Students' mean age at the time of testing was 5 years 7 months.

The upper portion of Table 1 shows the mean score for students in half- and full-day kindergarten on each of the six subtests, as well as the overall pre-reading skills composite score. The difference between groups was statistically significant on the Rhyming subtest, with children in the full-day program scoring about one point higher, on the average, than children in the half-day kindergartens.

Students were not, of course, randomly assigned to their kindergarten programs. Therefore, differences that exist in the two groups in the early part of the school year reflects in part the decision-making process of the parents in choosing one program over the other. For example, the fact that full-day students appear to have better skills in some pre-reading areas may indicate a selection bias. Parents of children with somewhat more advanced reading skills may have entered their children in the lottery for the full-day program, while parents of children who had not yet mastered many pre-reading skills may have selected the half-day program as more appropriate.

Because other variables may play as large a role in academic performance as the length of the school day, information was also obtained on the relationship between age, sex, number of parents in the home, and primary language, and the students' scores on the MRT. Table 2 gives the correlation coefficients obtained between each pair of variables. Those which are statistically significant are marked with an asterisk. These correlation coefficients are a measure of the strength of the relationship between the variables which are under comparison. The more closely related they are, the higher the correlation coefficient will be (without regard to the sign).

As the upper half of Table 2 indicates, age was not found to be significantly related to any of the subtest scores. Girls, however, did somewhat better than boys on the Letter Recognition subtest.

Not surprisingly, those children whose first language was other than English achieved lower scores on the Rhyming, School Language and Listening, and Quantitative Language subtests, as well as on the pre-reading skills composite. Their scores were not significantly lower in Auditory Memory and Visual Matching tasks.

The number of parents in the child's household did not appear to play a significant role in the scores obtained on any of the Metropolitan Readiness subtests, nor on the composite pre-reading skills score.

Post Test

The second administration of the MRT was in March 1986. Level II, appropriate for the latter part of the year, was given to 227 students. The lower half of Table 1 gives the mean scores for each of the eight subtests and the pre-reading skills composite score. On the Beginning Consonants and Finding Patterns subtests, as well as on the composite pre-reading score, the scores of students in the full-day program were significantly higher than those in the half-day program. The full-day students also did significantly better on the two optional subtests, Quantitative Concepts and Quantitative Operations.

These differences, however, while statistically significant, must be interpreted in terms of their meaning for classroom performance. The actual differences on each subtests ranged from only one to one and a half points. Such small differences are probably not meaningful in terms of a child's actual skill level and performance in the classroom. On the other hand, the composite scores were also significantly different. The half-day students' mean score was 55, which was at the 64th percentile, while the full-day students' score was 60, at the 76th percentile. A caution must be mentioned in interpreting this difference, however. Since the full-day students began the year with a slightly higher mean compostie score, one would expect them to remain higher at the end of the year, given similar experiences. This is, in fact, what happened. Thus, the posttest differences on the MRT cannot be seen as evidence that the full-day program produces academically better-prepared students.

On the second administration of the MRT, age again was a factor on only one of the subtests, which tested listening skills in the area of language; older children scored higher than younger. Girls achieved higher scores than boys on the two auditory skills subtests, which concerned beginning consonants and sound-letter correspondence.

Speaking English as a first language was significantly related to higher scores on two of the subtests, Listening and School Language. Again, whether the child lived with both parents or only with one parent did not significantly affect MRT scores. The lower half of Table 2 indicates the correlation coefficients obtained between each pair of variables. Those coefficients which are statistically significant are indicated with an asterisk.

The Behavioral Academic Self-Esteem Inventory

Pre Assessment

The BASE was administered in November 1985 to 233 students. For this test, the teacher was asked to rate each student on each item. The upper portion of Table 3 gives mean scores for the half- and full-day groups on each of the five subtests. Half-day students were rated significantly higher than full-day students in the area of Student Initiative. This subtest includes such items as showing self-direction and initiating new ideas. The half-day students also scored significantly higher on the total BASE score.

Age and sex were not significantly related to ratings on any of the BASE subtests. Speaking English as a primary language, however, was associated with higher scores on the Social Attraction (leadership, positive self-image) and Self-Confidence subtests, as well as on the total BASE score.

Having two parents in the home was significantly related to higher scores on all BASE subtests with the exception of Student Initiative. In addition, students living with both parents achieved higher total BASE scores than students living with one parent.

Post Assessment

When teachers were asked to rate their students again in March, scores were obtained for 217 children. The lower half of Table 3 compares half-day and full-day mean scores on each subtest and on the total score. For this rating, scores differed significantly on only one subtest, Social Attention (cooperation, politeness in the classroom), with those in the full-day program scoring higher.

On the second rating, age again was not related to differences in scores. Sex, however, was a factor on the Social Attention subtest, with girls scoring higher than boys.

The effect of living in a two-parent home appeared to be much less powerful at this point in the school year. None of the subtests showed a significant difference between children living in one-parent or two-parent families. See the lower half of Table 4 for specific correlation coefficients.

Children whose primary language was English received higher scores than other children on the Self-Confidence subtest, although the total BASE scores did not significantly differ.

Sample-Student Questionnaires for Teachers

Two kinds of information were available from the surveys which teachers completed regarding a random sample of their students. The first type of information assessed the level of familiarity which the teachers felt for their students' behavior. Each teacher was asked to indicate how well she could predict each selected student's behavior or reaction to eight possible classroom events. The teacher was to indicate the strength of her prediction on a three-point scale from 1 =can predict this event very well to 3 = can predict this event a little. The teacher could also indicate that she had no idea what the student might do under the specified circumstances.

Reference to Tables 5 and 6 indicates that teachers in both half- and full-day kindergartens were relatively confident, even in November, that they could predict their students' behavior in the given circumstances. Ratings of all events averaged between "very well" and "reasonably well". In addition, ratings by the two groups of teachers were so similar as to be almost identical. Thus, it appears that a half-day kindergarten program provides the teacher with sufficient time to get to know her students.

In addition, a separate analysis was conducted of the instances in which teachers indicated that they "have no idea" or are "not sure" in answer to a question on this survey. The number of times that any teacher marked "have no idea" was so small for most survey items that it was not possible to make comparisons between half- and full-day programs. On only three questions were the numbers large enough to evaluate; these items appear in the table on the next page.

PERCENT OF TIMES TEACHER INDICATED "NOT SURE"

	Half-Day		Full-Day	
	Pre	Post	Pre	Post
Has a pet	15	16	13	2
Has allergies	4	3	3	6
Has unusual interests	6	7	10	6

These numbers are too small to analyze statistically. They seem to indicate that full-day teachers are more apt to learn about a student's pet during the course of the school year than are half-day teachers. Clearly, if this pattern were seen in most or all of these questions, the implication would be that the extra time spent with the student in the full-day program provides a more in-depth understanding of the student than is possible in the half-day program. However, the differences between programs on the other questions were even smaller than those seen here. Consequently, the educational significance of this single findings seems minimal.

The second type of information obtained from teachers was an assessment of student behavior during the last hour of the kindergarten session. One argument opposed to a full-day kindergarten is based on the idea that 5- to 6-year-old children cannot tolerate a program of that length, and that their behavior by the end of the day will show an increase in restlessness and inattentiveness, and a decrement in classroom skills. Teachers rated their randomly chosen students in 13 areas, in an attempt to determine if the end of the day is a problem for the full-day classes. For seven areas, including restlessness, tiredness, talkativeness, excitement, energy, aggression, and anxiety, ratings ranged from 1 = "very much" to 3 = "very little". Again, teachers could indicate that they had no clear picture of the child's behavior. Thus, a low score indicates a more severe problem. For the other six areas, which included listening ability, cooperation with one another, fine motor skills, gross motor skills, attention span, and ease of transition from one activity to another, ratings were on a 5-point scale from 1 = "very high" to 5 = "very low". For these six areas, a low score indicates a lesser problem, while a high score suggests a more severe problem. (Refer to the Appendix for a copy of the original questionnaire, and an indication of the way in which each item was coded.)

The lower portions of Tables 5 and 6 provide the mean ratings of each group in the 13 behavioral areas. On the first assessment, ratings differed significantly on only one area, ease of transition, with the full-day teachers indicating a more severe problem. On the second rating, however, no differences between groups were statistically significant.

These data indicate quite strongly that teachers feel equally knowledgeable about their students, regardless of program. In addition, the behavior of students in both programs is rated very

similarly by their teachers. Thus, the data from teacher survey does not indicate any differences in the two programs as presently constituted.

Teachers were also asked on this questionnaire to indicate their preference among the program options. The following table shows the number of teachers in each program who selected each option.

	PRE		POST	
	Half-Day*	Full-Day	Half-Day*	Full-Day
preferred half-day	0	0	0	1
preferred full-day	1	3	3	3
indicated "no preference"	1	1	2	0
other: (written in by teachers)				
full-day, alternate days	1			
half-day or 9-2 ONLY	1			
9-2 only			1	

*While all four half-day teachers responded to both surveys, on the post assessment two of the teachers gave separate responses for their two classes. Thus, the number of teachers responding appears to change from pre to post.

Class Questionnaire for Teachers

In order to get a broader picture, each teacher was also asked to complete questionnaires that summarized information for her entire class, both in November and March. The content of this questionnaire was very similar to that filled out by the teachers on randomly selected students, with the addition of a question on preference with regard to program.

The upper half of Table 7 compares the average proportion of students in the two programs who exhibited each of the behaviors included in the survey. Because the number of respondents involved was so small, it was not possible to analyze these responses statistically. In addition, responses to a given question ranged from 30--100% on some items, depending on the classroom. Therefore, the figures shown in this table must be interpreted with caution, and apparent differences cannot be assumed to be significant.

The only behavior in this table which does appear to differ by program is laughing. It is not clear whether this difference, if significant, is related to a difference in interpreting this item, or to a genuine difference between programs. Other differences between groups appear too small to be educationally meaningful.

The lower half of Table 7 presents data on the teachers' knowledge of their students. They were asked to indicate the proportion of the class whose behavior they could predict, given a series of events or

situations. In this case, the answers given by different teachers are much less variable than in the previously discussed part of the survey. As a result, it is possible to have some confidence that the means presented do represent the two groups of teachers in a reliable way. However, the differences between half- and full-day responses are again too small to be meaningful.

In addition, teachers were asked to rate the behavior of the whole class during the last hour of the session. Table 8 presents this data. The upper part of this table shows the rating of six behaviors: tiredness, talkativeness, excitement, energy, aggression, and anxiety, on a three-point scale, with 3 = "very much," 2 = "some," and 1 = "very little." The lower portion of the table gives the average rating of six other items on a 5-point scale, with 5 = "very high," 4 = "good," 3 = "average," 2 = "fair," 1 = "very low." The items rated include listening ability, cooperation, fine motor skills, gross motor skills, attention span, and ease of transition from one activity to another.

Interpreting these findings once again requires that the cautions discussed above be kept in mind. The upper portion of Table 8 indicates that both half- and full-day students exhibit "some" to "very much" tiredness, talkativeness, excitement, and energy by the last hour of the kindergarten session. This indicates that, based on the judgment of their teachers, students show an "end of the day" effect, regardless of the length of time they spend in school.

One difference between programs which is evident from the data in the lower half of Table 8 is the amount of variability in teachers' responses. The responses of the full-day teachers ranged from 1 (very low) to 5 (very high) across all of the items except fine and gross motor skills; the half-day teachers, on the other hand, all gave ratings of either 3 (average) or 4 (good) on all items. On the whole, the full-day teachers appear to be indicating a somewhat lower level of listening ability, cooperation, and attention, and somewhat greater difficulty in making transitions from one activity to another during the last hour before dismissal. Only the last area, relating to ease of transition, is supported by other survey data. As a result, this information at present merely suggests a trend.

Teachers were also asked to list three advantages and three disadvantages of each type of program. These comments have been compiled and are included in this report immediately following the tables.

Parent Questionnaire

Parents were surveyed in several important areas. In addition to a small amount of demographic information, parents provided information on their children's after-school activities, their behavior during the first half-hour after they return home, changes in behavior over the past six months (since their children began kindergarten), and type of kindergarten program they prefer.

All of the children surveyed had attended a preschool for some period of time. The vast majority of both groups had had at least two years of preschool experience, as indicated in the table below. The differences between groups were not statistically significant.

PERCENT OF CHILDREN WHO HAD ATTENDED PRESCHOOL

	Half-Day	Full-Day
1/2 year	3	3
1 year	6	4
1 1/2 years	6	5
2 years	46	57
more than 2 years	40	31

Many half-day children attended another program as well as the Wilmette kindergarten. 34% of the students in the half-day program were enrolled in an additional school program which meets 3 to 5 days per week, compared to only 4% of the students in the full-day program. (This difference was significant at $p = .01$.) Several half-day parents also commented that their children took various lessons after kindergarten, including music and ice skating.

Table 9 indicates the percent of children in each group who spend most of their after-school time in each of five mentioned activities. The activities include watching TV, sleeping, playing with others, playing alone, and a combination of these. Most of the children in each group engage in a combination of the activities listed. Of the individual activities, the most common one is playing with others. None of the differences that exist between groups are statistically significant.

In addition, parents rated the amount of change they perceived in their children's behavior since the start of kindergarten. Ratings were on a 5-point scale from 5 = "definite decrease" to 1 = "definite increase." Again, there were no significant differences between the responses made by parents of half-day or full-day pupils. All parents reported, on the average, that their children had shown some increase in cooperation when playing with others, excitement toward learning, self-confidence, gross motor and fine motor skills, independence, academic learning, and listening skills. They reported little change in sleep requirements, energy level, misbehavior, and in behavior such as crying, temper tantrums, and thumbsucking.

Parents were also asked about three other kinds of changes in behavior patterns: those in sleeping habits, appetite, and attitude toward school. On the average, parents in both groups reported that their children were "about the same" or "slightly improved" in all three areas. Parents of full-day students reported improvement in attitude toward school which was significantly higher than that reported by the parents of half-day students. It is difficult to interpret this

difference, since we have no information on how the two groups differed before they entered kindergarten, or at the beginning of the year. In addition, the difference between average ratings of 3.3 and 3.8, while significant in a statistical sense, do not appear to be large enough to be meaningful in an educational sense.

To rule out the possibility that children in one group had, by chance, experienced unusual changes in home life that might overshadow the differences caused by the two kindergarten schedules, parents were also asked to indicate the extent of major changes that had occurred at home during the past six months. Examples of major changes were a new family member, a divorce, or a move to a new neighborhood. Parents in both groups reported little change, on the average. For the small proportion of each group who did report major changes, most indicated that their children's behavior was affected only "some" to "a little." Again, no significant differences were found between the two groups on this item.

As in the teachers' survey, the issue of student fatigue was assessed in the parent questionnaire by having the parents rate five of the same behaviors which were rated by the teachers. Parents were asked to indicate the level of each of the following behaviors, during the first half-hour after the child returns from school: tiredness, talkativeness, excitement, energy, and aggression. Rating was on a three-point scale, from 1 = "very much" to 3 = "very little," so that a higher score indicated a more severe problem. Parents in both groups stated that tiredness and aggression were, on the average, "very little" to "some" problem, while talkativeness, excitement, and energy were exhibited "some." No differences were found between groups.

Two important questions for the parents concerned the type of kindergarten program preferred by each group. The table below indicates the percent of each group who indicated a preference for a full- or half-day program. While the parents of half-day students are split on the preferred program, parents of full-day students appear to be overwhelmingly in favor of the full-day program.

	PERCENT WHO SELECTED EACH OPTION	
	Child is in Half-Day	Child is in Full-Day
Prefers Half-Day	54%	8%
Prefers Whole-Day	33%	88%
No Preference	5%	0%
Other	7%	4%

The parents who marked the "other" category mentioned such options as a full-day program 3 to 4 days a week, a 3/4 day program, a full-day program with after-school daycare at the Park District, and more emphasis on academics. The one option mentioned by several parents

was a suggestion that the fall semester be a shorter day (9 - 12, 9 - 1, and 9 - 2 were all mentioned) and the longer day be started in the spring semester.

The second question in this area was related to the above comments, and asked parents to indicate their preference for a full-day program that lasts from 9 a.m. to 2 p.m. or one which lasts from 9 a.m. to 3 p.m. Both groups were very evenly split on this question, as the table below indicates.

	PERCENT WHO SELECTED EACH OPTION	
	Child is in Half-Day	Child is in Full-Day
Prefers 9 - 2	46%	39%
Prefers 9 - 3	46%	42%
No Preference	17%	19%

In the comments that accompanied this question on the survey, parents indicated their reasons for choosing one option over the other. The two reasons given by almost all parents who preferred the 9 - 2 day were the 5-year-old's tiredness and possible need for a nap, and the opportunity for extra time at home before siblings return from school. In addition, many felt that 9 - 3 was just too long a day for a kindergarten-aged child. Those parents who favored the 9 - 3 schedule stated that they would prefer to have their kindergarten child riding the bus or walking home with friends and siblings, rather than at a different time. In addition, many parents stated that the 2:00 dismissal made it too difficult to coordinate with the schedules of the rest of the family.

An open-ended question at the end of the parent survey asked for additional comments. Due to the large number of parent surveys, it was not feasible to list every comment individually. Instead, all comments were read and categorized. A representative sample of these comments is included following the tables and the comments by teachers.

The comments from parents of children in the full-day program were generally positive and indicated satisfaction with their children's adjustment to school. Most felt that, because a large number of children attend preschool for several years, there is an increased need for a more advanced and more challenging kindergarten curriculum. However, they recommended that both full-day and half-day programs should be available, since some commented that the full-day program may not be appropriate for all children, and not all are ready for this kind of experience.

The parents of children in the half-day program had widely varying reactions to their children's program and to the issues presented in the survey. The overwhelming majority agreed that the option of participating in the full- or half-day program was one that must be

left up to the parents, based on the child's readiness and the family situation. Many parents were upset about the lottery and the way in which it was handled; most of these parents felt that chronological age and maturity were better than chance at selecting children for the full-day program, and should have been used instead. The major divergence in opinion existed between those parents who were angry because their children had not had the opportunity for growth that they believed was offered in a full-day program, and the parents who stated that they would remove their children from the public school if full-day kindergarten were the only option available. Both of these groups were large in number and both indicated strong feelings on this matter. There were also several parents in this group who expressed dissatisfaction with the school system as a whole and believed that parental input was rarely sought.

A number of parents in both groups suggested that a program that began in the fall with a half-day schedule and then expanded in the second semester to a 9 to 2 or a 9 to 3 program would be beneficial to students.

Regression Models

Regression analysis is a statistical tool which enables one to explore the ability of certain variables to predict a given outcome. In this study, the purpose was to predict school achievement (the Post MRT score) and self-esteem (the Post BASE score), based on demographic variables, participation in half-day or full-day program, and relevant pretest scores.

To conduct a regression analysis, one first begins by proposing a model of prediction. For this study, two major models were predicted and are shown below. the first model, for example, indicates that a given student's posttest score on the Metropolitan Readiness Test is predicted by a series of variables which include the pretest score on the same test (that is, the child's previous level of achievement); the student's age, sex, number of parents in the home, and primary language; the program in which the student is enrolled (full- or half-day); and the student's level of self-esteem, as indicated by the BASE posttest score.

Model I

MRT Posttest = MRT Pretest + Demographic Variables + Program + BASE Posttest.

Model II

BASE Posttest = BASE Pretest + Demographic Variables + Program + MRT Posttest.

In regression analysis it is possible to obtain (1) the relative weight of each variable (called the beta coefficient), (2) tests of significance, and (3) measures showing the goodness of the fit of the

model (called R-square). Beta coefficients indicate how the variables included in each model explain variation in the MRT or BASE posttest score in terms of both the size of the relationship and its direction. The measure of the goodness of fit of the model indicates how much of the variation in the MRT or BASE postest score can be accounted for by the inclusion of the other variables in the model. Significance tests tell whether the beta coefficients differ significantly from those which could have easily occurred by chance. Results to be discussed here were screened for a statistically significant effect at $p < .01$. This level of significance, slightly more stringent than the level used most typically by researchers, was selected as appropriate due to the large number of correlations obtained in this study. The more correlation coefficients that are obtained, the possibility increases that some will appear to be significantly large simply due to chance. By selecting the .01 level of significance, this possibility is lessened considerably. The significance level of .01 means that the chances are 99 in 100 that any difference said to be significant in this study is truly not due to chance.

Prior to performing the regression analyses, an assessment of the correlation between the various independent variables was undertaken. (See Tables 10a and 10b.) From this assessment, it was determined that several of the variables of interest were correlated. The correlations between demographic variables and the MRT and BASE test scores were discussed in section IV under Demographic Information. In addition, all of the MRT and BASE pre and posttest scores were significantly intercorrelated.

The regression analysis was conducted in a stepwise fashion. That is, the computer program enters variables into the equation one at a time, beginning with the independent variable which explains the greatest amount of variance in the dependent variable. Then the variable that explains the greatest amount of variance in conjuction with the first will be entered second, and so on. The program continues entering variables from best to worst until a variable is reached which fails to reach statistical criteria which are set by the program.

The findings of the regression analysis for Model I are displayed in the table below.

PREDICTING MRT POSTTEST SCORE

Step	Variable	R-square	Beta Coefficient	t-value
1	MRT Pretest score	.49	.70	12.61*
2	MRT Pretest score	.53	.61	10.56*
2	BASE Posttest score	(.53)	.22	3.77*

*$p < .01$

This analysis indicates that in the first step, the MRT Pretest score was entered into the regression equation. This score is the best predictor of MRT Posttest score, with 49% of the variance in Posttest

score being predicted by the Pretest score. Thus, students who score high on the MRT Posttest tended to score high on the MRT Pretest, and students who scored low on one also tended to score low on the other. This finding is fully in line with considerable data on student school performance which indicates that the best predictor of future school achievement is past school achievement.

In the second step, the Posttest score on the BASE was also entered into the equation. The fact that the beta coefficient for the MRT Pretest score dropped slightly on this step indicates that the influence of the MRT Pretest is slightly diminished if the confounding effect of BASE Posttest score is controlled. Together, the MRT Pretest and BASE Posttest predict 53% of the variance in MRT Posttest score; thus, to include the information about self-esteem only adds a small amount of additional predictive ability. (It is important to remember here that, while prediction of a variable is the purpose of the exercise, it is not possible to infer the presence of causal relationships. All relationships in a regression equation are correlational in nature.)

None of the other variables--sex, number of parents in the home, primary language, or kindergarten program--were important enough in their effect on the MRT Posttest score to be entered into the equation.

The findings of the regression analysis for Model II are displayed in the table below.

PREDICTING BASE POSTTEST SCORE

Step	Variable	R-square	Beta Coefficient	t-value
1	BASE Pretest score	.54	.73	14.00*
2	BASE Pretest score	.62	.66	13.44*
2	MRT Posttest score	(.62)	.30	5.98*

*$p < .01$

This analysis indicates that in the first step, the BASE Pretest score was entered into the regression equation. This score is the best predictor of BASE Posttest score, with over half (54%) of the variance in Posttest score being predicted by the Pretest score. Thus, similarly to the MRT findings, students who receive high ratings on the BASE Posttest tended to be rated highly on the BASE Pretest, as well. Further, the child's level of reading readiness was also a significant factor in predicting self-esteem at the time of the posttest. Once again, this is not a surprising finding, since it reflects in part the the fact that the school environment takes on increased importance to children as they spend more time there.

Once again the other variables were found to be too weak to be useful in attempting to predict a student's self-esteem rating. In spite of the fact that the number of parents in the home was significantly

correlated with the child's self-esteem rating at an early point in the year, by March the child's performance in school is far more strongly related to self-esteem.

At the meeting to discuss the preliminary results of this study, the kindergarten teachers suggested that, although program did not show up in the regression analyses as a significant predictor variable for the MRT or BASE scores, it might be an important factor in quantitative skills. Two subtests on the MRT, Quantitative Concepts and Quantitative Operations, were also administered to each student during the posttest, but these scores are not included in the posttest composite readiness score. Therefore, an additional regression analysis was conducted with the following model.

Quantitative score = Demographic Variables + Program + MRT Posttest + BASE Posttest.

The findings of this analysis are summarized in the table below.

PREDICTING QUANTITATIVE SCORE

Step	Variable	R-square	Beta Coefficient	t-value
1	MRT Posttest score	.30	.55	8.50*
2	MRT Posttest score	.33	.53	8.40*
2	Program	(.33)	.16	2.57*

*$p < .01$

In this analysis the MRT Posttest score is the best predictor of Quantitative score, with a little less than one-third of the variance in Quantitative score being predicted by the MRT Posttest score. Further, the program in which the child was enrolled was also a predictor of Quantitative score. In this case, it adds an improvement in predictive ability of about 3%. The students in the full-day class appear to have slightly higher scores than students in the half-day program. While this is significant, it is not a strong finding, since no pretest was available on quantitative skills. Therefore, it is not possible to determine if children in the full-day program already had slightly better quantitative skills than children in the half-day program. Because other data collected in this study suggested a slight selection bias in favor of full-day students, this possibility cannot be ruled out. Again, demographic factors did not play an important role in predicting quantitative scores.

V. SUMMARY

This study collected a very comprehensive set of data on the two types of kindergarten program currently in operation in the Wilmette district. Student school achievement test scores were collected at an early and a later point in the year, and ratings of student self-

esteem were also made at the same time as the pre and post achievement testing. Teachers in both programs were surveyed to determine how well they were getting to know their students, and how well they felt they were meeting the students' needs, and were asked to report on their students' behavior and responsiveness during the last hour of the school day. Parents were asked for similar information about their children immediately after they returned home from school and were also asked to describe the changes they had seen in their children's behavior since the beginning of the school year. Both parents and teachers were asked to state their preferences regarding the kindergarten program, and additional comments were solicited.

In addition, the study used a powerful statistical technique, multiple regression, to determine which of the many variables studied were truly important in predicting success in kindergarten, defined as academic readiness and a good self-image. Because of the comprehensive nature of the data collection and the statistical design of the study, the results provide valid and educationally relevant data for the Wilmette school district.

In summary, the findings of this study indicated only very small differences between half-day and full-day kindergarten. On the Metropolitan Readiness Tests, the full-day students started the year with a slightly higher score, and finished the year with a slightly higher score. The regression analysis found that the program in which the child was enrolled was not an important variable in predicting that student's performance on the MRT at the second testing, but that the child's pretest score was a good predictor of posttest score.

It is important to remember that the two kindergarten programs basically differed in day length and number of extra activities. They were not designed to differ in the amount of academic learning time that was taking place. In addition, only four months elapsed between the first and second administration of the MRT and other instruments. It is possible, therefore, that if the full-day program had differed academically from the half-day program, and if more time had passed between test administrations, an academic difference might have been found between the two programs.

On the self-esteem rating, the half-day students started the year with slightly higher ratings in all areas, but by the end of the year, the full-day students had caught up, and the total scores for the two groups were not significantly different.

Further, data provided by teachers and by parents indicated only a few small differences in the behavior of children enrolled in the two types of kindergarten program.

The purpose in conducting a study such as this one, and collecting and analyzing data, is to look for regularities or patterns in the data. The patterns that emerge can then be explored to determine if they are simply due to chance, or whether they indicate true differences among the variables in the study. In this study of two types of kindergarten programs in Wilmette, it was very difficult to find any patterns which were related to program. While there were some

isolated differences, the general patterns indicate no difference between program on academic readiness, self-esteem, or behavior at home or at school.

Therefore, no conclusive evidence was found in this study that one program was necessarily better than the other, given the way the current kindergarten programs are designed. It now becomes a matter of judgment for the district to reconcile the financial aspects of running the kindergarten program with the opinions of district parents, who support the presence of both full-day and half-day options within the district.

TABLE 1

METROPOLITAN READINESS TESTS & KINDERGARTEN PROGRAM

MEAN SUBTEST SCORES BY GROUP

PRE-TEST

MRT SUBTEST	HALF-DAY PROGRAM (N=141)	FULL-DAY PROGRAM (N=89)
Auditory Memory	10.0	10.1
Rhyming	10.0	11.1*
Letter Recognition	10.2	10.6
Visual Matching	12.4	12.7
Sch. Lang. & Listening	12.9	13.0
Quantitative Lang.	9.0	9.3
Composite	64.6	66.8
	POST TEST	
	(N=132)	(N=88)
Beginning Consontants	10.3	11.2*
Sound-Letter Correspond.	12.2	13.1
Visual Matching	7.4	7.8
Finding Patterns	11.0	12.6*
Sch. Language	7.6	7.8
Listening	6.7	7.2
Composite	55.2	59.6*
Quantitative Concepts	6.2	7.0*
Quantitative Operations	11.6	12.8*

* $p < .01$

TABLE 2
CORRELATIONS BETWEEN
DEMOGRAPHIC VARIABLES AND THE METROPOLITAN READINESS TEST

PRE TEST

MRT SUBTEST	AGE	SEX	# PARENTS IN THE HOME	PRIMARY LANGUAGE
Auditory Memory	.10	.08	-.03	-.02
Rhyming	-.02	.07	-.01	-.33*
Letter Recognition	.01	.16*	-.05	-.12
Visual Matching	.10	.06	-.08	-.05
Sch. Lang. & Listening	.02	.02	.00	-.35*
Quantitative Lang.	.11	.01	-.04	-.18*
Composite	.07	.10	-.05	-.28*

POST TEST

Beginning Consontants	-.03	.18*	-.03	-.14
Sount-Letter Correspond.	.05	.15*	-.06	-.04
Visual Matching	.08	.09	-.09	.04
Finding Patterns	.04	.03	-.03	.02
Sch. Language	-.02	.06	.01	-.47*
Listening	.18	-.01	-.06	-.27*
Composite	.07	.14	-.07	-.14
Quantitative Concepts	.04	.03	-.07	-.16
Quantitative Operations	.03	.04	-.11	-.03

* $p < .01$

TABLE 3

SELF-ESTEEM (BASE) SCORES & KINDERGARTEN PROGRAM:
MEAN SUBTEST SCORES BY GROUP

FIRST ASSESSMENT

BASE SUBTEST	HALF-DAY PROGRAM (N=141)	FULL-DAY PROGRAM (N=89)
Student Initiative	22.6	20.8*
Social Attention	11.2	10.6
Success/Failure	7.5	7.0
Social Attraction	11.2	10.3
Self Confidence	7.6	7.3
TOTAL	60.6	56.1*

SECOND ASSESSMENT

	(N=129)	(N=87)
Student Initiative	23.3	23.7
Social Attention	11.3	12.2*
Success/Failure	7.6	7.7
Social Attraction	11.1	11.3
Self-Confidence	7.6	8.0
TOTAL	61.0	62.8

* $p < .01$

TABLE 4
CORRELATIONS BETWEEN
DEMOGRAPHIC VARIABLES AND THE BASE

PRE ASSESSMENT

BASE SUBTEST	AGE	SEX	# PARENTS IN THE HOME	PRIMARY LANGUAGE
Student Initiative	.11	-.04	.09	-.16
Social Attention	.03	.14	.16*	-.11
Success/Failure	.04	.02	.22*	-.15
Social Attraction	.06	-.03	.18*	-.18*
Self Confidence	.04	.03	.17*	-.19*
TOTAL	.07	.03	.18*	-.14

POST ASSESSMENT

Student Initiative	.04	.11	.03	-.09
Social Attention	-.02	.22*	.02	-.08
Success/Failure	.04	.09	.14	.04
Social Attraction	.02	.01	.06	-.16
Self-Confidence	-.01	.10	.02	-.20*
TOTAL	.03	.13	.06	-.12

* $p < .01$

TABLE 5
SAMPLE STUDENT QUESTIONNAIRE

FIRST RATING

	HALF-DAY PROGRAM (N=18)	FULL-DAY PROGRAM (N=22)
Teacher's knowledge of students:		
Predicting behavior/reactions:		
fire	1.7	1.6
surprise clown visit	1.8	1.6
worksheet problem	1.5	1.7
lost pencil	1.6	1.8
falling in a puddle	1.8	1.9
finding $1.00	1.8	1.9
choice of game partner	2.0	2.1
choice of learning activities	1.8	2.1
COMPOSITE	15.3	15.2
	(N=22)	(N=23)
Student's behavior 1 hour before end:		
restlessness	2.2	2.2
tiredness	2.4	2.6
talkativeness	2.1	2.0
excitement	2.2	2.1
energy	2.1	1.9
aggression	2.7	2.3
anxiety	2.5	2.5
listening ability	2.2	2.8
cooperation with peers	2.1	2.6
fine motor skills	2.4	2.4
gross motor skills	2.4	2.4
attention span	2.4	2.9
ease of transition	2.0	3.1*

*p <.01

TABLE 6
SAMPLE STUDENT QUESTIONNAIRE

SECOND RATING

	HALF-DAY PROGRAM (N=30)	FULL-DAY PROGRAM (N=21)
Teacher's knowledge of students:		
Predicting behavior/reactions:		
fire	1.5	1.7
surprise clown visit	1.7	1.5
worksheet problem	1.6	1.5
lost pencil	1.6	1.5
falling in a puddle	1.6	1.5
finding $1.00	1.6	1.5
choice of game partner	1.7	1.6
choice of learning activities	1.5	1.6
COMPOSITE	13.6	12.0
	(N=30)	(N=21)
Student's behavior 1 hour before end:		
restlessness	2.3	2.1
tiredness	2.4	2.2
talkativeness	2.1	1.9
excitement	2.0	2.0
energy	1.8	1.7
aggression	2.7	2.4
anxiety	2.7	2.4
listening ability	1.9	2.8*
cooperation with peers	1.8	2.1
fine motor skills	2.1	2.3
gross motor skills	2.0	2.0
attention span	2.2	2.8
ease of transition	2.0	2.3

*p <.001

TABLE 7

WHOLE-CLASS QUESTIONNAIRE

MEAN PERCENT OF STUDENTS WHO EXHIBITED EACH BEHAVIOR IN PAST WEEK

	PRE		POST	
	Half-Day	Full-Day	Half-Day	Full-Day
thumb sucking	17	15	10	10
crying	7	15	8	10
initiate an academic activity	40	28	80	62
lying down at inappro. time	33	28	20	10
bathroom accidents	2	5	2	0
laughing	95	78	90	42
initiate a play activity	78	90	93	92
physical fighting	20	20	23	22
initiate a physical game	55	55	50	48
verbal fighting	28	55	32	45

PERCENT OF CLASS WHOSE BEHAVIOR COULD BE PREDICTED IN THESE EVENTS

	PRE		POST	
	Half-Day	Full-Day	Half-Day	Full-Day
a fire	80	80	80	80
surprise visit by a clown	70	75	75	80
a problem on a worksheet	80	80	80	85
a lost pencil	70	85	80	90
falling in a puddle	70	75	70	90
finding $1.00	70	55	80	80
choice of partner for a game	80	33	80	85
choice of a learning activity	65	65	80	85

TABLE 8

WHOLE-CLASS QUESTIONNAIRE

MEAN RATING OF BEHAVIOR DURING LAST HOUR OF THE DAY

	PRE		POST	
(scale = 1 to 3)	Half-Day	Full-Day	Half-Day	Full-Day
tiredness	1.75	2.25	2.0	1.75
talkativeness	3.0	2.75	3.5	2.5
excitement	2.5	2.0	3.5	2.25
energy	2.5	2.5	3.5	2.5
aggression	1.75	2.5	2.5	1.75
anxiety	1.25	1.5	1.0	1.25
(scale = 1 to 5)				
listening ability	4.0	2.0	4.0	2.75
cooperation	4.0	1.75	3.8	3.0
fine motor	3.25	3.0	3.8	4.0
gross motor	3.25	3.25	4.7	4.25
attention	3.75	1.75	3.7	2.5
ease of transition	4.0	1.75	3.8	3.0

TABLE 9

WILMETTE PARENT SURVEY

	HALF-DAY PROGRAM	FULL-DAY PROGRAM
After-school activity:		
watches	6%	11%
sleeps	1%	1%
plays with others	29%	30%
plays alone	12%	13%
Single Parent	1%	18%
Both parents work	25%	44%
Behavior change in past 6 months:		
cooperation in play	2.5	2.3
sleep requirements	3.0	2.9
energy level	2.8	2.8
excitement for learning	2.1	1.8
self-confidence	2.2	2.1
gross motor skills	2.2	2.2
independence	2.0	2.0
fine motor skills	1.9	1.8
misbehavior	3.0	3.0
crying, tantrums, thumb-sucking	3.1	3.1
academic learning	1.9	1.8
listening skills	2.2	2.2
Change in home life, past 6 months	3.0	3.0
Effect in change in child's behavior	2.6	2.7
First 1/2 hour after school:		
tiredness	1.5	1.7
talkativeness	2.3	2.1
excited	2.1	1.9
energy	2.2	2.0
aggression	1.7	1.5
Change in past 6 months:		
sleeping habits	2.9	3.1
appetite	3.3	3.4
attitude toward school	3.3	3.8*
Preferred type of kindergarten program:		
half-day	54%	8%
whole-day	33%	88%
no preference	5%	0%
other	7%	4%

*p <.01

Table 10a

CORRELATIONS AMONG DEMOGRAPHIC VARIABLES
AND PRE/POST MTR AND BASE SCORES

	PREREADN	POSTREAD	PREBASE	POSTBASE
PROGRAM	.1550	.2267	-.1934	.0919
AGE	.0685	.0682	.0731	.0208
SEX (1=BOYS 2 = GIRLS)	.1030	.1403	.0332	.1339
NUMBER OF PARENTS IN THE HOME	-.0472	-.0670	.1845*	.0576
ENGLISH AS PRIMARY LANGUAGE (1=YES 2=NO)	-2793*	-.1412	-.1364	-.1208

* $p < .01$

Table 10b
INTERCORRELATION OF PRE AND POST SCORES
ON THE MTR AND BASE

	POSTREADN	PREBASE	POSTBASE
PREREADN	.7072	.3025	.4130
POSTREAD		.2148	.5052
PREBASE			.6749
POSTBASE			

All correlations are significant at $p < .0001$.

WILMETTE FULL-DAY PRE KINDERGARTEN CLASS QUESTIONNAIRE

Advantages to half-day program

Length of day about matches child's ability to be productive
Aren't forced to deal with large numbers of peers for prolonged periods of time
I would guess the child would be able to relate the specifics of his day more completely to parent
They respond more sympathetically to highs and lows
Children have the other half day to engage in a private sport or music lessons etc
Excellent for the "developmentally young" five-year old
Children are fresh--less tired
Children are more able to control behavior
Children can leave each day feeling good
All children (5 years old) have a better chance of success
Not as tiring for the younger children
Children never reach saturation point in social or learning activities

Advantages to full-day program

The added time does make it possible for more small groups
I'm observing children in a greater variety of activities and for longer periods of time
I think I may know my parents better earlier in the year
More time to develop activities and capitalize on current interests
Know the children better
Less stress
More relaxed atmosphere
Children can spend more time with activities when necessary
Less hectic day
Children learn to be more comfortable with the school
Provides more time for each child to participate in activities
Know children better than in half time programs
More relaxed atmosphere
Time allows for resource people (art, music, gym)
Teacher gets to know children better

Additional Suggestions

I do like the 9:00 to 2:00 day. I do not think it a suitable program for all families and would hope an option continues to be available.

WILMETTE FULL-DAY POST KINDERGARTEN CLASS QUESTIONNAIRE

Advantages to half-day program

The children are able to tell about activities that took place during the whole session
You don't need to feed them and care for them during a lunch period
A half day seems long enough for forced involvement with 22 plus peers
For less mature children it offers an experience that is not exhausting
It allows for parents to have their children home to enrich them with nurturing and love for half a day
The children don't tire so easily
An appropriate time for them to be in school
The children's attention span is much longer as a result of the shorter time in school

Advantages for a full-day program

Teacher does get to know them
They seem generally comfortable after the first eight weeks
I'm not trying to beat the clock as often
The children have a better program with the involvement of specials
More relaxed for everyone
Children have more time to socialize and practice skills
Allows time for resource teachers to work with children, which is a big plus
Children are exposed to more areas of the curriculum
They are acquainted with the full-day routine before entering first grade... i.e. lunch, riding the bus, etc.
Children have more time to work and develop projects, throughout the day
Their projects are not touched by another class
Children seem more relaxed and initiate activities more freely in a full-day setting
More knowledge on the children and parents
Much easier to individualize instruction

Additional Suggestions

I wouldn't like another hour added
Teacher/aide support and presence is necessary from 9 til 2
I don't see us any farther along academically than half day classes have been in the past
As full-day programs seem to be the popular choice now
I definitely feel the classes should be much smaller - between 16-20 children (instead of 24)
Slightly shorten the day for Kindergarten

Children who turn five in the fall months (Sept.- Nov.) should not be included in full day program. The full day program should end at 2 p.m., and possibly go until 12 for the first month or 2. Children were very cranky until January, when everything (socially, emotionally, physically, and academically fell into place. Since winter vacation the full day (8:45-2:00) program is a delight.

There are so many highlights to a full day class. The entire day's activities are well integrated. When we have art study in the morning (studying a print of a painting), I can easily find children painting their interpretation of the painting at an easel in the afternoon. Since I use "The Breakthrough to Literacy" as one of my reading components, I find the children easily reading 15-25 sentences (that they have composed) in the morning, and again in the afternoon. After lunch, at least two-thirds of the class rushes to make sentences telling of their lunch time experiences. I find one of the nicest aspects of one class all day is that the children do not have to share materials with another class, and projects and black buildings may stay out or up untouched by others. My children seem much closer to each other and have a genuine concern for one another. They are "best friends" with each other. The resource center teacher, and computer teacher have commented how much at ease the class is and how much more mature and unflustered they are compared with the 2 half day groups. Both teachers have commented that the children get much more from their programs since the children come in with the appropriate attitude and are good listeners. When problems arise they handle them with poise, whereas the two half-day groups become frustrated and tearful. Taking field trips is a joy because I don't have to worry constantly about getting back to school for dismissal. In all full day is great!

WILMETTE HALF-DAY PRE KINDERGARTEN CLASS QUESTIONNAIRE

Advantages to Half-day Program

Less transitions - better control of class due to this
Less contact with older students - thus less aggression, swearing
More time at home to pursue independent activities and enrichment programs
Activity Centered Learners have a chance for free unstructured time in addition to school
Children may have more time at home
Allows children to have some private time away from school, where they can have more individual attention and some time for creative play in small groups and special projects in small groups.
Interest usually stays high
Limited amounts of lethargy exhibited
Teacher may respond positively to change of groups
Gives child the opportunity to gradually be introduced to school
Children are able to rest at home
This program suits those children who aren't quite ready for full-day programs

Advantages for Full-day Program

More time to fit in activities on a daily basis
Less students for the teacher to worry about
Planning time is built in as students go out for "specials"
Lower anxiety - more relaxed atmosphere for students
Exposure to special areas such as art, gym, and music
More time for developmental activities and more time for creative projects in all areas - math, science, reading, creative movement, etc ...
Projects can be maintained day to day (left standing)
Enrichments (gym, art, music, etc.) without feeling rushed
Children who would go to another school situation have to cope only with one group, instead of adjusting to two
More time to complete activities
More time for enrichment
More time for music, play, and physical activity

Additional Suggestions

In building a program for next year, I strongly advise a 9-2 program if the full-day was continued.

I like the "extended day" or alternate day program where children stay 3 half days each week and 2 full day. Their full days do not alternate. They are always the same so that they are able to keep a constant predictable schedule.

Ex. Suzy would come M & W for a full day and Tues. & Th. for a half day.
Johnny would come Tues. & Th. for a full day and M & W for a half day.

In other words, half the class would stay M & W afternoons while the other half would stay Tues. & Th. afternoons. Fridays were half days for all children in Kindergarten and the time was considered planning time in which the Kindergarten teachers could use to plan projects and share ideas together and hold conferences etc.

This program was used in New Caroan Connecticut with great success and still is being used. It has all the positive aspects if a full day program with the extra advantage of being able to have small groups and more individualized time with the students in the afternoon.

WILMETTE HALF-DAY POST KINDERGARTEN CLASS QUESTIONNAIRE

Advantages for half-day program

Children do not tire
Children are not likely to feel anxiety
Children stay fresh for experiences
Good alternative for those who are not able to handle full days yet
Gives parents one more year to spend some day time with children
Children who are developmentally not ready to handle full day need half day
Allows more time in small group setting at home with creative alternative playtime
Good for the child that is not yet ready socially, emotionally, or academically to be in a full day program
Time at home with parents to explore outside interests
Shortened time better for less ready students

Advantages for full-day programs

For children who would attend two schools a day, the single program is less stressful - more stable
Less rush to the day if gym, art, and music are included
Less pressure - not as rushed
Able to expose children to specials - i.e. gym, art, music
More time to get involved in discussions and take more time to get to know to get to know individual student needs and styles
More time to accomplish tasks
Can have specials for class - gym, art, music, etc.
More relaxed environment - less pressure
More time to complete activities
More time for free play
More time for music and gym
There's less setting up, cleaning and resetting on teachers part
Time for special - art, music, gym
Time to fit more in on a regular basis

Additional Suggestions

The half day option should be an entirely separate class
Only in favor of a 9-2 full day kindergarten with a limit of 20 students with an aide

REPRESENTATIVE COMMENTS FROM PARENTS OF FULL-DAY STUDENTS

The full-day kindergarten program is outstanding. The children do not feel over-worked or over-tired as evidenced by the fact that they are always inviting each other over to play after school. First grade will probably be a very small adjustment for these children, as they have already experienced meeting other teachers and going to different classrooms for different subjects.

I think the time has come for full day kindergarten. 1 I think it is excellent and necessary since almost all kindergarten children are not entering with at least 2 years of preschool and a multitude of extracurricular experiences which would make half-day kindergarten redundant and boring.

I think that the all-day kindergarten program is long overdue. Today, children have so much prior school experience that they are much more prepared and able to handle an extended program.

To have a full-day kindergarten with so little curriculum was ridiculous. This is supposed to be school, not babysitting.

For one think, I appreciate this survey. It gives me the feeling the school district is interested. My only other comment is that I am disappointed by the haste with which the full day kindergarten was put together. Some of the work my son brings home is the sort he did 2 years ago in preschool. Despite that he seems to be enjoying himself and looks forward to school.

I feel with the many preschool programs available, children are ready for a full-day program since by and large this is not their first school experience. I strongly feel there should be a stronger academic base for first grade put into this program as well.

I hope you will get parent input directly into your evaluation of this year's pilot program through face to face discussion with parents either in meetings or on committees. I think you need to know what goes on at home as well as at school. I personally would be enthusiastic and willing to participate in such a forum.

Perhaps the schools would consider a class (full day) of children whose parents both work. Or the school/staff might gain a bit more empathy or sympathy toward the children whose Moms work. I've seen and experienced several incidents of a "suburban attitude' towards working Moms--and hopefully my son doesn't have to deal with it. Also I feel the full-day program enables the teacher to really execute an area of study. I'm not sure they would be able to accomplish as much as has been this past year.

It's wonderful (full day). My child has not napped for 2 years. She wants to be busy and with other children. The full day allows her this experience.

We are very satisfied with the educational and social benefits of the full-day program and hope the program will continue in future years.

REPRESENTATIVE COMMENTS FROM PARENTS OF HALF-DAY STUDENTS

I have been very happy with the half-day program. My child has greatly enjoyed school. I think if she had had to attend the full day, she might have not enjoyed her few morning hours as much as she did. The law of diminishing returns would have set in.

We are opposed to full-day kindergarten; we have a second daughter who will enter in fall '86 and we do not want her in school all day. The family and the mother has as much of an educational responsibility as does the school.

My daughter loves school and activities and morning get pretty long waiting for school to start. I must admit I feel pretty cheated that she couldn't have been in all-day this year--she would have loved it.

I am a strong believer in half-day kindergarten. What's the big rush? Separation from home should be a gradual process. Kindergarten should not operate as a facilitator to getting Mom back into the workplace--it should be for the child. There is as much learning that will take place outside the school environment as in it. Clearly, many parents desire a full-day program for their children. I am not one of them.

The introduction of our family to public schools via the lottery was a very disappointing experience which extended to an initial disillusionment on the part of our child toward the schools' sense of justice. This feeling that certain people receive more or better benefits is difficult to shake--and a poor reflection on the system itself. It is my hope that the system will rise to the occasion to support the half-day group should they appear to have fallen behind during this year of being forced controls.

I feel that the individual families have to have the option whether there be a half-day or full-day program. We should have the choice.

I like my child being in the half-day kindergarten program. We enjoy spending time together in the morning. I also think it's important for children to have time to play alone as well as with others at this age. I'm in no rush to send my children off to school. It worries me that a full day of kindergarten may become mandatory.

Full day should be applied to children with the maturity and energy level to handle that long of a day.

Considering the prevalence of preschool education in this community and the roll-back in the deadline, I feel that the current curriculum in the kindergarten is too simple, and lacks the sophistication required by children who have been exposed to learning for 2 or 3 years prior to entering kindergarten. The current kindergarten is too babyish.

The half-day teacher has done her best to offer as much curriculum as possible; however there is no way that 2 1/2 hours can compare to six! The half-day students have been deprived of art, P.E., trips to cultural centers offered to full day!! It has been a grossly unfair program. The school board will be fortunate to not be sued!!

I would suggest a stronger academic approach. I would also suggest more attention paid to the no-speaking English student. They seem to be passed by.

I feel children that to all day to school learn more. I am concerned that my child will not do well in first grade compared to the other students who went full day. also, I did not like the lottery system that the Wilmette schools had.

We as well as other parents we've talked to whose children "lost" the full-day lottery feel that our children are thereby getting a substandard kindergarten experience when compared to the full-day program.

I feel that my son is ready for more of a "challenge" in kindergarten than he is getting with the present curriculum. I feel that most of the children--especially the "older" students are ready for more concrete learning skills in the areas of reading, language skills, and basic arithmetic skills.

If the system goes to full-day, those choosing half-day should be in a separate class--not as in Evanston where you must remove you child from a full-day class if you wish shorter hours for your child. This is very disruptive for the children--especially those leaving the class.

Parents' wishes aside, there are many kids who should be in half-day kindergarten, both for their own good and for the good of the class. And of course, many parents will opt for a half-day program anyway. I feel that the school should be able to handle both half- and whole-day programs, with the full-day possibly having an earlier birthday cut-off that the half-day.

I feel this district wants full-day kindergarten whether a minority of parents want it or not, and the minority opinion doesn't seem to be well-regarded by the governing body who make the decisions for this district. I do not want full-day kindergarten for my children. I think we undermine the unity of the family by sending our children off to school full time at such younger and younger ages. Who are we really trying to accommodate, the best interest of the child or the convenience of the parent? I want to be kept informed of this situation--thank you.

It is nice to have the option: my kindergartener is I think better off in the half-day program, because she is a first child and easily stressed. My second child, on the other hand, could probably easily handle a full-day program.

11/25/85

WILMETTE SCHOOL DISTRICT 39
KINDERGARTEN STUDENT QUESTIONNAIRE (3)

In response to the Kindergarten Study, would you please complete the attached questionnaire thinking about an individual child in your class. Take the first child on your class list, and select every fourth child listed. You will then be rating 25% of your students, and complete a questionnaire for each one.

Name of Child _____

1. About one hour before your Kindergarten session ends, how would you rate this child on the following:

	very much 1	some 2	very little 3	have no idea
restlessness				
tiredness				
talkativeness				
excitement				
energy				
aggression				
anxiety				

2. How well could you predict this child's behavior or reaction to the following?

	very well 1	reasonably well 2	a little 3	have no idea
a fire				
surprise visit by a clown				
problem on a worksheet				
lost pencil				
falling in a puddle				
finding $1.00				
choice of a partner for a game				
choice of a learning activity				

3. Is this child enrolled in a
   1 half-day program
   2 whole day program

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4. About one hour before your Kindergarten session ends, how would you rate this child generally on:

	very high 1	good 2	average 3	fair 4	very low 5	have no idea
listening ability						
cooperation with one another						
fine motor skills						
gross motor skills						
attention span						
ease of transition from one activitiy to another						

5. Does this child

	yes 1	no 2	not sure
have a pet?	___	___	___
brother/sister?	___	___	___
come from a two parent family?	___	___	___
cry easily?	___	___	___
speak with a lisp?	___	___	___
have allergies?	___	___	___
have an unusual interest?	___	___	___
have a good imagination?	___	___	___
have adequate fine motor skills for his/her age?	___	___	___
have adequate gross motor skills for his/her age?	___	___	___

11/25/85

WILMETTE SCHOOL DISTRICT 39
KINDERGARTEN CLASS QUESTIONNAIRE (2)

In response to the Kindergarten Study, would you please complete the attached questionnaire thinking about the entire class.

1. Is the Kindergarten program you teach

_____ half day? _____ full day?

2. Do you prefer a program which is

_____half day? _____ full day? _____ no preference?

3. In the past five school days, what percent of the children in your class has exhibited the following behaviors?

	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
thumb sucking										
crying										
initiate an academic activity										
laying down at inappropriate times										
bathroom accidents										
laughing										
initiate a play activity										
physical fighting										
initiate a physical game activity										
verbal fighting										

4. About one hour before your Kindergarten session ends, how would you rate your class generally on the following:

	very much 1	some 2	very little 3
tiredness			
talkativeness			
excitement			
energy			
aggression			
anxiety			

5. About one hour before your Kindergarten session ends, how would you rate your class generally on:

	very high 1	good 2	average 3	fair 4	very low 5
listening ability					
cooperation with one another					
fine motor skills					
gross motor skills					
attention span					
ease of transition from one activity to another					

6. Once again these are estimates. This week, what percent of your class would you predict their behavior or reactions to the following?

	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
a fire										
a surprise visit by a clown										
a problem on a worksheet										
a lost pencil										
falling in a puddle										
finding $1.00										
choice of a partner for a game										
choice of a learning activity										

7. How well are you able to meet your students' needs?

	very well 1	somewhat 2	limited degree 3	no opinion
socially				
emotionally				
academically				
physical play				

8. What are the three advantages which you see to a half-day program?

_____

_____

_____

9. What are three advantages which you see to a full-day program?

_____

_____

_____

10. Thank you for your time and do you have any other suggestions?

_____

_____

_____

1/27/85

WILMETTE SCHOOL DISTRICT 39
KINDERGARTEN PARENT QUESTIONNAIRE (1)

1. Prior to kindergarten this year, how much pre-school experience did your child have?
   - 1 4 months (or 1/2 year)
   - 2 8 months (or 1 year)
   - 3 12 months (1-1/2 years)
   - 4 16 months (2 years)
   - 5 More than 2 years

2. Answer question 2 only if your child is enrolled in a half-day program. In the past six months, was your child enrolled in any other regular school program (3-5 days per week) besides the Wilmette Kindergarten?
   - 1 no
   - 2 yes If yes, please specify which one._____

   Is your child currently enrolled in any other regular school program (3-5 days per week), besides the Wilmette Kindergarten?
   - 1 no
   - 2 yes If yes, please specify which one._____

3. Does your child take the bus to school?
   - 1 no
   - 2 yes
   - 3 sometimes

4. What is your child's age? _____ years _____ months

5. What is your child's primary activity upon returning from school?
   (Select only one)
   - 1 watch T.V.
   - 2 sleep
   - 3 plays with others
   - 4 plays alone
   - 5 combination of above
   - 6 other, please specify. _____

6. In what type of program is your child currently enrolled?
   - 1 half-day
   - 2 whole day

7. What type of kindergarten program do you prefer for your child?
   - 1 half-day
   - 2 whole day
   - 3 no preference
   - 4 other, please specify. _____

8. Are you a single parent?
   1 no
   2 yes

9. If yours is a two-parent household do both parents work?
   1 no
   2 yes
   0 not a two-parent household

10. In the past five months, would you rate any change you have observed in your child's behavior on the following characteristics.

	definite decrease 5	some decrease 4	stayed about the same 3	some increase 2	definite increase 1
cooperation when playing with others					
sleep requirements					
energy level					
excitement toward learning					
self-confidence					
gross motor skills (jumping, hopping, throwing, etc.)					
independence					
fine motor skills (cutting, drawing, etc.)					
misbehavior					
behavior such as crying, temper tantrums, thumbsucking					
academic learning					
listening skills					

11. Some events in the home such as a new family member, a divorce, or moving to a new neighborhood can effect childrens' behavior in different ways. It may not always be the importance of the specific event, but rather your child's reaction to the event that affects his or her behavior.

    a. In the past six months, how much of a change has there been in your child's lifestyle?
       1 major
       2 moderate
       3 little
       4 none

    b. If there was a change, how strongly do you feel this has affected your child's behavior?
       1 very much
       2 some
       3 a little
       4 very little

12. In the first half hour upon returning from school, rate the level of each of the following for your child.

	very much 3	some 2	very little 1
tiredness			
talkativeness			
excited			
energy			
aggression			

13. In the past six months, has there been any change in your child's behavior regarding the following?

	definitely improved 5	slightly improved 4	stayed the same 3	slightly worse 2	definitely worse 1
sleeping habits					
appetite					
attitude toward school					

14. If the Wilmette School District only had a full-day program, would you prefer the dismissed time at

__1__ 2:00 p.m. __2__ 3:00 p.m. __3__ no preference

Why? _____

_____

15. In the past six months, have you noticed any other changes in your child which you would want to mention?

_____

_____

16. Do you have any other comments regarding the half-day kindergarten or the full-day kindergarten program which you would like to include? We welcome other comments as well and thank you for your time.

_____

_____

_____

_____